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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,396

10/07/2005

Koji Akiyama

MAT-8725US

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EXAMINER

HANLEY, BRITT D

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/552,396	<b>Applicant(s)</b> AKIYAMA ET AL.	
	<b>Examiner</b> BRITT HANLEY	<b>Art Unit</b> 2889	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/10/2009</u> .  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

[01] Amendment filed on 04/21/2009 has been entered and noted by Examiner. Claims 1-10 are pending.

***Claim Rejections - 35 USC § 112***

[02] The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

[03] Claims 1 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

[04] Regarding claims 1 and 6, the amendment "the air blowing means is positioned above a surface of the plasma display panel to direct air to the surface in a direction away from parallel relative to the surface" is unclear because the air can be blown parallel to the surface of the substrate or the air, after being blown on the substrate, can travel in a parallel direction away from the substrate. For the purpose of examination, Examiner interprets the phrase to mean that the air blowing means directs air toward the surface of the PDP in directions that are not parallel to the surface of the PDP as shown in the drawings.

***Claim Rejections - 35 USC § 103***

[05] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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**[06]** The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**[07]** Claims 1, 4-6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant cited Koichi (JP2004-127805) in view of Applicant cited Kazuya *et al.* (JP 07-162180).

**[08]** Regarding claim 1 and 6, Koichi discloses an aging method and device for performing an aging of a plasma display panel (paragraph 1) using an aging device including an air blowing means (blower 2) for cooling a plasma display panel (20), the air blowing means is positioned above a surface of the plasma display panel (drawing 1) to direct air to the surface in a direction other than parallel relative to the surface (in drawing 1, the air is blown in a perpendicular direction toward the PDP 20), the method comprising: cooling the plasma display panel during the aging (paragraph 8). Koichi does not explicitly appear to disclose that the PDP is cooled during the aging process while changing at least one of the direction or amount of air blown from the air blowing means with time.

**[09]** However, in the same field of aging electronic devices, Kazuya *et al.* disclose a case (51) which has fan units (55). The case rocks on shaft (31) while cooling the plurality of circuit boards (15). See paragraphs 22 and 51 and also drawing 2.

**[10]** At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Koichi and Kazuya *et al.* to modify the aging process of Koichi to include the air flow guide of Kazuya *et al.* in order to cool the circuit boards uniformly (paragraph 51 of Kazuya *et al.*).

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**[11]** Regarding claims 4 and 9, the combination of Koichi and Kazuya *et al.* disclose the aging method of a plasma display panel according to claim 1 and claim 6, wherein the air blowing means includes a plurality of air blowing devices (56, Kazuya *et al.*) so that, during the aging, at least one of the plurality of air blowing devices is moved (rocked by shaft 30, paragraph 51, Kazuya *et al.*). The motivation to combine is the same as listed above

**[12]** Regarding claims 5 and 10, the combination of Koichi and Kazuya *et al.* disclose the aging method of a plasma display panel according to claim 1 and claim 6, wherein the air blowing means includes a plurality of air blowing devices (56, Kazuya *et al.*) so that, during the aging, at least one of the plurality of air blowing devices changes in a direction (rocked by shaft 30, Kazuya *et al.*).

**[13]** Claims 2, 3, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant cited Koichi (JP2004-127805) in view of Applicant cited Kazuya *et al.* (JP 07-162180), and in further view of Applicant cited Oono (JP03-75596).

**[14]** Regarding claims 2 and 7, the combination of Koichi and Kazuya *et al.* disclose the aging method and device of a plasma display panel according to claims 1 and 6, wherein the air blowing means includes a plurality of air blowing devices (paragraph 33, Kazuya *et al.*). The combination does not appear to disclose an air blowing amount of at least one of the plurality of air blowing devices is changed (blown density is controlled, drawing 2, Oono).

**[15]** However, in the same field of cooling electronic devices, Oono discloses an air blowing amount of at least one of the plurality of air blowing devices (6 and 2) is changed (blown density is controlled, drawing 2, Oono).

**[16]** At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Koichi, Kazuya *et al.*, and Oono to use two or more fan in order prevent a circuit board overheating situation because of fan redundancy and

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to allow easy fan replacement (paragraph 47, Kazuya *et al.*). Further, it would be obvious to one of ordinary skill in the art to change the air blowing amount of at least one of the plurality of air blowing devices in order to control the rate of cooling so that cracks are not formed due to rapid cooling, or in order to maintain a temperature.

**[17]** Regarding claims 3 and 8, the combination of Koichi and Kazuya *et al.* disclose the aging method of a plasma display panel according to claim 1 and claim 6, wherein the air blowing means includes a plurality of air blowing devices (paragraph 33, Kazuya *et al.*). The combination does not appear to disclose an air blowing direction changeable means provided between the plurality of air blowing devices and the plasma display panel so that, during the aging, the air blowing direction changeable means changes directions of air blown from the plurality of air blowing devices.

**[18]** However, in the same filed of cooling electronic devices, Oono discloses an air blowing direction changeable means (air flow guide 2) provided between the plurality of air blowing devices (6) and the plasma display panel (3) so that, during the aging, the air blowing direction changeable means changes directions of air blown from the plurality of air blowing devices (drawing 2 shows that the air blowing direction is changed as it advance through air flow guide 2).

**[19]** At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Koichi, Kaziya *et al.* and Oono to modify the method and device of Koichi to include the plurality of air blowing devices of Kazuya *et al.* in order to prevent overheating of the PDP by having redundant fans, and to include the air blowing direction changeable means of Oono in order to direct air to areas that need cooling.

### ***Response to Arguments***

[20] Applicant's arguments filed 04/21/2009 have been fully considered but they are not persuasive.

[21] Applicant's arguments regarding Shinji et al. are mute in light of the new art.

[22] Regarding Oono, Applicant argues on page 7 that Oono does not disclose or suggest 1) changing, during an aging, at least one of the direction or amount of air blown from the air blowing means with time or 2) that the air blowing means is positioned above a surface of the plasma display panel to direct air to the surface in a direction away from parallel relative to the surface, as required by claims 1 and 6 (emphasis added). However, Oono is not relied upon to teach either 1) or 2). Koichi teach changing a direction of the air blown from the air blowing means with time, and Kazuya *et al.* disclose air blowing in a perpendicular direction to the surface of the PDP.

[23] Applicant further argues on page 6 that Oono is silent regarding changing a direction of air from air blowing means with time. Examiner disagrees. In drawing 2, the direction of the air is changed as the air passed through the air flow guide.

### ***Conclusion***

[24] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

[25] A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**[26]** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Britt Hanley whose telephone number is (571) 270-3042. The examiner can normally be reached on Monday - Thursday, 6:30a-5:00p ET.

**[27]** If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on (571)272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**[28]** Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Britt Hanley/ Examiner, Art Unit 2889	/Toan Ton/ Supervisory Patent Examiner Art Unit 2889
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